

ABSTRACT

A process to synthesize substituted phenols such as those of the general formula $RR'R''Ar(OH)$ wherein R, R', and R'' are each independently hydrogen 5 or any group which does not interfere in the process for synthesizing the substituted phenol including, but not limited to, halo, alkyl, alkoxy, carboxylic ester, amine, amide; and Ar is any variety of aryl or heteroaryl by means of oxidation of substituted 10 arylboronic esters is described. In particular, a metal-catalyzed C-H activation/borylation reaction is described, which when followed by direct oxidation in a single or separate reaction vessel affords phenols without the need for any intermediate manipulations. 15 More particularly, a process wherein Ir-catalyzed borylation of arenes using pinacolborane (HBPin) followed by oxidation of the intermediate arylboronic ester by OXONE is described.